



Introducing

ENVIROSENSE[®]

Packaging with tomorrow in mind[™]





**SUSTAINABLE THINKING
DRIVES SUSTAINABLE
SOLUTIONS**



Solutions for Tomorrow's Challenges Are Creating Opportunities Today.

Truly sustainable packaging. The entire consumer products industry is focused on, and committed to, providing shoppers with more sustainable products and packaging. That's why at Sonoco, we've created EnviroSense®, packaging with tomorrow in mind. We recognize the critical importance of developing sustainable packaging solutions that will protect and preserve our planet for future generations. And while the end result may take the form of a package, getting there demands a special mindset, a unique perspective, passionate curiosity, and an authentic commitment to truly change the world we live in. Finding holistic solutions of any kind requires focused thought and an exploration of new ideas, materials and processes that can help answer the challenge before us. At Sonoco, we're applying EnviroSense to guide our thinking as we work to develop more sustainable packaging that supports our purpose, Better Packaging, Better Life. And in the end, we believe this work will be better for our planet and better for your brand.

What makes EnviroSense?

While we make a wide variety of packaging products, using a wide range of materials, not all of them meet our standards to be EnviroSense Qualified™. To be part of this special portfolio, a package needs to meet some combination of the following criteria: Recyclable, Compostable, Responsible Fiber Sourcing, Reusable, Recycled Content, Packaging Optimization, Reduced Environmental Impact and Bio-based Content.



Reusable: Packaging that is returned a specified number of times to be refilled/reused for its original purpose.



Compostable: Packaging that biodegrades under a controlled process in a managed composting system. Claims of compostability should be accompanied by recognized testing and certification; they should identify industrial or home compostability.



Recyclable: Packaging that meets the requirements for carrying a recyclable label in accordance with ISO 14021 or the FTC's Guidance on Environmental Marketing Claims. This includes the ability to be collected from consumers, sorted, and processed into a marketable recycled material.



Recycled content: Made with a percentage of post- or pre-consumer recycled material. Post-consumer material has completed its intended purpose and recycled into a useful raw material. Pre-consumer materials are un-sold products or material created during the process of manufacturing; examples include damaged or aged inventory, clippings or trimmings that cannot be used back in the original manufacturing process.



Bio-based content: Material derived from renewable biomass such as wood fiber, grasses, sugar cane, crops or agricultural waste. Not all bio-based packaging is biodegradable.



Optimized: Packaging that is the minimum adequate weight or volume for meeting the necessary requirements of the product being packaged.



Reduced environmental impact: Per a PIQET streamlined life cycle assessment, demonstrates reduced impact in GHG emissions, water use, energy use, and or solid waste.



Responsible fiber: Either recycled fiber, or wood fiber from known and responsible sources (FSC®, PEFC or SFI® preferred); or agricultural waste fiber. Sonoco sources from paper mills certified by the Forest Stewardship Council (FSC®), the Programme for the Endorsement of Forest Certification schemes (PEFC), and the Sustainable Forestry Initiative (SFI®).

Bringing Versatility to Sustainability

There's an old saying, if your only tool is a hammer, every problem looks like a nail. That's not the case when it comes to sustainable packaging options from Sonoco. We are one of the few packaging suppliers in the industry who can offer solutions across the substrate spectrum.

Our EnviroSense portfolio encompasses a range of packaging materials, including rigid paper containers containing 100% post-consumer fiber, rigid plastic packaging containing post-consumer recycled content, mono-material flexible pouches and plastic containers that are recyclable, along with innovative packaging made from all natural, agricultural fibers, such as sugarcane, which has an impressive beginning of life story.

With the range of products you make to satisfy your customers, shouldn't your packaging options be just as diverse? EnviroSense can help.

What Makes EnviroSense For You?

Based on this criteria, we currently have the following products in our portfolio designed to help you meet your sustainability goals:



ENVIROFLEX™ PE POUCH

- Suitable for in-store drop-off systems (i.e., recyclable if clean & dry)
- Designed to run on both vertical and horizontal form-fill-seal equipment and also available as premade pouches
- Barrier can be tailored to product needs and to increase product shelf life
- Gloss and matte finishes
- Windows so consumers can view the product
- Reclosable Options
- High-end printing to showcase your brand
- Suitable for various products - cookies and crackers, confections, dry/dehydrated foods, personal care, sweet & savory snacks, pet food & treats, and more

EnviroSense Qualified:



ENVIROFLEX™ PE FLOW WRAP

- Suitable for in-store drop-off systems (i.e., recyclable if clean & dry)
- Designed to run on horizontal form-fill-seal equipment
- Barrier can be tailored to product needs and to increase product shelf life
- Available in matte and gloss finishes
- Can maintain tactile feel of current multi-material packaging
- Suitable for various products – home and personal care wipes, single and multi-serve snack foods

EnviroSense Qualified:





ENVIROSERVE™ PUNNETS & TRAYS

- Lightweight trays containing a range of 20-45% recycled PET using recycled beverage bottles
 - Specific PCR content can be provided for each packaging format
- Post-consumer recycled (PCR) content is customizable depending on customer's sustainability needs and resin availability
- Reduction in plastic weight compared to clamshells (minimum 20%)
- Built in tamper evidence
- Easy open only or easy open/reclose options
- Modified atmosphere capable to extend shelf-life for certain products

EnviroSense Qualified:



ENVIROSERVE™ PET CLAMSHELLS

- Lightweight packaging containing a range of 20-45% recycled PET using recycled beverage bottles
 - Specific PCR content can be provided for each packaging format
- Post-consumer regrind (PCR) content is customizable depending on customer's sustainability requirements and resin availability
- Have introduced a small amount (<10%) Thermoform Clean Wash Flake and working to expand further
- Developing a more recyclable thermoform package through use of labels recognized by the Association of Plastic Recyclers (APR) as recyclable

EnviroSense Qualified:





ENVIROSERVE™ PET DUAL-OVENABLE TRAYS AND BOWLS

- Excellent performance through the frozen supply chain and reheating process
- Customizable post-consumer recycled content up to 30% dependent on customer's sustainability needs and resin availability

EnviroSense Qualified:



ENVIROSERVE™ PP TRAYS, BOWLS, AND CUPS

- Excellent performance throughout the filling, freezing, and reheating processes
- Trays and bowls can be recovered using current Material Recovery Facility (MRF) sorting technology
 - Available substrate colors include natural, white, and new near infrared (NIR detectable) black
- Nonstock availability
 - PP trays and bowls are proprietary, custom projects

EnviroSense Qualified:





ENVIROSERVE™ LEAFY GREENS

- Lightweight trays containing, on average, 70% post-consumer recycled PET
- Reduction in plastic weight of 30 – 45% compared to traditional lettuce clamshells of similar ounce capacity
- Compatible with SmartSeal® Fresh tamper evident lidding film
- Easy open and easy open / reclose lidding film options
- Modified atmosphere capable to extend shelf-life for certain products

EnviroSense Qualified:



ENVIROCAN™ ME, SONOCO'S PAPER CONTAINER (WITH METAL END)

- Can body contains 100% recycled fiber – 85% post-consumer recycled content
- Paper-based packaging has high consumer appeal
- Suitable for recycling in the steel stream
- Can be tailored to product and supply chain needs across a broad variety of markets
- Third party verified life cycle assessment (LCA) demonstrated package had a lower carbon footprint compared to competing packaging formats.

EnviroSense Qualified:





ENVIROCAN™ PB, SONOCO'S PAPER CONTAINER (WITH PAPER BOTTOM)

- Contains a minimum of 60% post-consumer recycled content
- Runs on existing machinery
- Paper over-cap option
- Available now for low to medium barrier product market requirements
- Suitable for recycling in paper stream

EnviroSense Qualified:



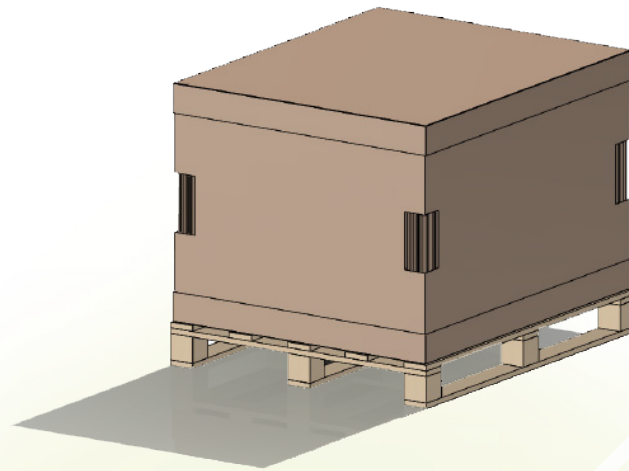
NATRELLIS® SUGARCANE FIBER PACKAGING

- Made from US grown sugarcane fiber: an annually renewable resource
- Convenient dual-ovenable performance for frozen and chilled prepared meal markets
- No PFAS added
- Variety of closure options, including heat sealed paper and film lidding and custom designed plastic lidding
- Recyclable in paper packaging streams
- *Pending qualification associated with industry accepted and compostability requirements

EnviroSense Qualified:



*Pending Certification



EOS, SONOCO THERMOSAFE®'S CURBSIDE RECYCLABLE PACKAGING

- Recyclable at curbside, reducing impact to landfill
- Available in 4 sizes and provides up to 72 hour 2°C to 8°C protection to ISTA 7E
- Offers a high level of insulating value and a soft cushioning to help protect payload
- Easy to dispose of, the entire knocked down package can be placed into the recycle bin
- Fully tested and certified as repulpable and curbside recyclable to OCC-E standards

EnviroSense Qualified:



ENVIROSENSE® FIBERMAX BULK BOX PACKAGING

- Maximize transportation efficiency, reduce storage space and easily recycle packaging at the end of its useful life
- Less than half the cost of similarly sized wooden crates
- Renewable, fully recyclable and containing a maximum amount of recycled materials
- FiberMax packaging is a viable option for maximizing sustainability efforts and objectives, while also helping your product reach your customers as intended

EnviroSense Qualified:





ENVIROSENSE® FIBERMAX MASTER ROLL PACKAGING

- EnviroSense FiberMax roll packaging can be as much as 25% more cost effective to purchase, 50+% lighter weight, and 100% recyclable when compared with wooden crate alternatives
- Constructed with Sonoco's SonoPost technology, EnviroSense master roll packaging can hold thousands of pounds while maintaining 100% recyclable capabilities
- Renewable, fully recyclable and containing a maximum amount of recycled materials, FiberMax packaging is a viable option for maximizing sustainability efforts and objectives, while also helping your product reach your customers as intended.

EnviroSense Qualified:

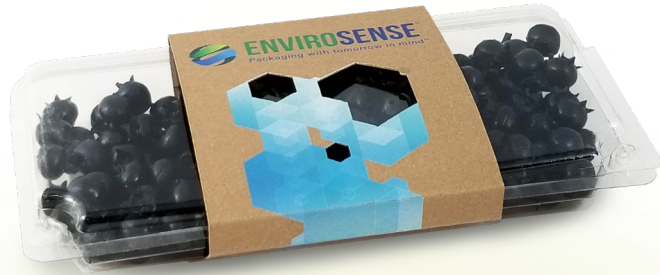


TRANSGUARD® RETURNABLE PACKAGING

- Returnable and reusable
- Recyclable at the end of the returnable program
- Reduce freight cost and associated emissions by 20-50% through customized tote height and footprint
- Rugged design stands up to years of reuse
- Maximized truck yield

EnviroSense Qualified:





ENVIROSENSE PAPERBLISTER™

- Plastic free alternative to carded blister packaging
- Recyclable in paper packaging streams
- Ability to include windows for product visibility
- Water-based sealing technology – no VOC's
- SFI® Certification available upon Request
- Suitable markets include a variety of retail applications: home and personal care products.
- 50-70% post-consumer recycled content board materials also available
- Seals on most Alloyd® brand sealing equipment

EnviroSense Qualified:



ECOTECT® PAPERBOARD

- Made from 100% recycled fibers with 85% post-consumer content
- The natural color and texture conveys a premium look and feel that resonates with consumers (2016 eye-tracking study performed at Clemson University CUshop™)
- Proven for offset lithography, flexography, and digital printing technologies
- Optimum stiffness, flatness, and bending endurance for a variety of converting applications
- Grades are available as chain-of-custody certified to any of the three fiber certification programs

EnviroSense Qualified:





FLATSTACK® PAPERBOARD SHEETS

- Engineered for consistent performance in automated palletizers
- Compared to corrugated sheet:
 - Minimum 5% reduction in weight
 - Minimum 15% material cost savings
- Lower freight costs - over two times more sheets shipped per truckload
- Improve warehouse efficiency - store five times the amount of sheets in same unit space
- Made from 100% recycled fiber with a minimum 85% post-consumer fibers
- Acceptable in commercial OCC recycling stream
- Grades are available as chain-of-custody certified to any of the three fiber certification programs

EnviroSense Qualified:



Certifications: Sonoco's U.S., Canadian, U.K., Brazilian and one of our Mexican mills are certified to one or more fiber certification programs. These are: the Forest Stewardship Council® (FSC®), Sustainable Forestry Initiative® (SFI®) and the Program for the Endorsement of Forest Certification (PEFC) Chain of Custody and Due Diligence System Standards. Additionally, we have plants in our composite can packaging, tubes & cores, and packaging carton operations certified to these programs and producing certified packaging. All but three of our 25 global paperboard mills use 100% recycled fiber in their production. Some amount of responsibly sourced virgin fiber is needed for select grades of paperboard. The amount of recycled fiber in our composite cans range from 60 to 80+ percent, depending on the product specifications for the package. On average, the amount of recycled fiber used in our industrial tubes and cores exceeds 95%.

FSC-C011144 SFI-00112 PEFC/29-31-248



Your Sustainability Story is Our Sustainability Story

At Sonoco, we work to be a collaborator, not just a supplier. And that means understanding your brand's sustainability story and goals, and contributing what we can to get you where you need to be. We work with our partners to help them reach their own unique goals, like:

- 100% recyclable packaging
- Packaging made from 100% recycled materials
- Lightweighting packaging to reduce overall carbon footprint
- Maximizing packout efficiency to reduce pallets/trucks
- Achieving Zero Waste to Landfill status at facilities
- Modeling shelf life and assessing barrier needs to avoid overpackaging
- Reducing denting and other packaging damage to avoid waste at retailers and in homes
- Providing compelling marketing and billboarding opportunities alongside maximized shelf life to minimize waste and transportation impact

To find out whether EnviroSense makes sense for you, just visit our website at: <https://www.sonoco.com/envirosense> or email 360solutions@sonoco.com